

RR10- Bransford
Chpt 8- Teacher Learning

• **Remember**

The main point of this chapter is that there are a variety of opportunities for teachers to continue improving their teaching practice as life-long learners. However, all workshops and training opportunities are not created equal. The same criteria used to design instruction that maximizes student learning and understanding can be applied to professional development for teachers (or anyone else, for that matter). People old and young, in school and out of school learn the same way. Learning environments that are learner-centered, knowledge-centered, assessment-centered and community-centered maximize the learning for understanding that is most likely to transfer into other contexts. The authors cite specific examples that incorporate these elements well.

The implications running through this chapter are on two levels. The first level relates to selecting professional development opportunities for oneself and co-workers. Teachers and administration would do well to seek out the opportunities that maximize deeper understanding because such understanding ensures transfer and maximizes potential impact on actual teaching practice. Second, designers and implementers of professional development should attend to some of the particular challenges inherent in creating productive learning environments for teachers. Challenges and possible responses are collated in the following chart.

Element of Design	Challenge	Suggested Responses
Learner-Centered	<ul style="list-style-type: none"> • Diverse experience, background knowledge, and consequent learning needs of adult trainees 	<ul style="list-style-type: none"> → include different stages of participation with roles that change as teachers become more expert → form interest groups around particular topics and projects → utilize flexible opportunities offered through technology applications
Knowledge-Centered	<ul style="list-style-type: none"> • Content of training not always firmly supported by research about learning • Focus on more generic pedagogy at expense of integrating pedagogy with content of various disciplines • Fundamental beliefs about students and purpose of course the teacher teaches are difficult to change. Difficult to get teachers to rethink the nature of their discipline 	<ul style="list-style-type: none"> → center content of training firmly in research about learning → direct training to development of pedagogical content knowledge, not just generic teaching techniques → use the subject matter as the primary vehicle for learn so that teachers learn how to teach a subject by focusing on their own experiences as learners → help teachers become more comfortable with the role of learner → give teachers more access to experts (experienced mentor teachers and field professionals)
Assessment-Centered	<ul style="list-style-type: none"> • Willingness to risk classroom experimentation 	<ul style="list-style-type: none"> → practice regular reflection on practice with a mind toward improvement → conduct action research

	<ul style="list-style-type: none"> • Feedback about what works, what doesn't, and why 	→ seek peer review and feedback
Community-centered	Lacking a community of practice mentality Trust to share success and failures	encourage → shared teaching experiences → professional discourse about books and articles → discourse re: data about student learning → shared decision making and responsibility for decisions → organize teaching schedules that enable experienced teachers to invest mentoring time with others → participate in action research

In the Assessment-Centered Environments section the authors note that extended opportunities for gathering information and meaningful feedback from peers are needed to support translation of facts into action and change. I think this gives support to the mentoring role of teacher and staff training. Mentoring provides relationship, in-time on-time feedback, and information in context. It is a much better model for training than periodic in-service seminars.

Also valuable, are opportunities for structured reflection, especially if opportunities are provided for processing this reflection with others in the context of a community of practice. It may be a challenge to create a trusting environment where teachers are willing to share both success and failures with one another, but the challenge would be worth the learning and community outcome. I think that the first practical step I can make toward that end in my community is to be more open to positioning myself as learner and inviting others to join me in honest reflection.

In the Action Research section I recognized an opportunity to make weekly staff meetings much more meaningful. By introducing Problem Solving strategies and challenging the staff to pursue answers through action research, weekly reporting could go beyond basic activity reporting and calendar updates (yawn!) to meaningful ongoing professional development.

The implications of evaluation, design and implementation of productive learning environments that promote understanding and transfer directly to TExES Reading Specialist Competency 014- Collaboration, Communication and Professional Development. The chapter describes model programs in which collaboration and communication support on-going learning and professional development for teachers in rich communities of practice.

Competency 014 (*Collaboration, Communication, and Professional Development*)
The reading specialist understands and applies procedures for collaborating and communicating with educational stakeholders and for designing, implementing, evaluating, and participating in professional development.

• **Connect**

Re: my experience with professional development

The authors note a progression of trends in teacher training topics for the 60's, 70's, and currently. I think I missed the 70's topic of lesson design ala Madeline Hunter because I was engaged in speech therapy practice at the time. Of course, since beginning this program at UTA I have been introduced to the model, but I had been wondering where it came from and when it emerged. Now I know.

But beyond answering that small niggling question, the text drew me to reflect on the progress of my own professional development. I wondered what a map of my professional development would look like. In what areas have I grown professionally over time? What themes have emerged and what was influencing my development? Which of the four elements defining productive learning environments have been evident in my professional development? Which have been lacking?

The descriptive map can be viewed in the separate document RR10Map.doc. From doing this exercise, I realized that most of my training experience has been pretty heavily weighted with information. But time for making practical application and transfer has often been up to me and how I responded to the content. I feel fortunate to have the speech pathology training that I do, as this gave more opportunity for application of theory to practice than the usual teaching courses offer. And I'm now aware that the reason I remember that material so well, is because I've used it. While in college I also took courses in history, English literature, mathematics, music and science. When I compare my active knowledge about children's language development etc. to what I know of these other subjects I realize how much usage of knowledge impacts both understanding and long-term memory. I was actually a music major for a while, and took quite a few classes in that department. But I remember very little because I haven't used it. I'm not even sure that my initial understanding was all that deep. In comparison, a lot of content from the two science classes that I took (geology and astronomy) have stayed with me over the years because they have informed my ability to observe what is going on around me. Similarly, I can remember hardly anything from the very content heavy seminars that I attended at a two-day national convention years ago, but the practical lessons I learned from participation in two week Adult Education workshop stay with me because it offered connection to other work that I've done, varying levels of assessment and feedback, development of a community of practice, and learning content through the experience of focusing on my role of learner. Bransford summarizes the typical approaches to formal teacher professional development: "occur once, deal with decontextualized information, and often do not resonate with teacher's perceived needs." (pg 204) His statement parallels my own experience. The professional development opportunities that I would subjectively evaluate as most fruitful/meaningful match the criteria exposed in research about how people learn: extended over time, encourage the development of learning communities that offer shared experiences and discourse around shared texts and data about student learning and focus on shared decision making.

Re: the challenge of changing perspectives

Designers of teacher training for the *Minds on Physics* program discovered that even though teachers' conceptual knowledge of instruction might change, their fundamental beliefs about their students and the the purpose of their teaching subject did not change. This observation challenged me to consider my own learning in this course. I wrote in the margin of my book: "I am experiencing something similar in regard to "knowledge" and content. The old way of thinking is more comfortable, more solid, a known – I'm always comparing new with old to incorporate, rather than *change*." I know I've been guilty of the same intellectual conservatism that our authors note is common among learners. In an attempt to monitor my progress and regression in this area I started a learning log for reflecting and processing .

I also took some time away from the syllabus to read through Wiggins & McTighe (1998), *Understanding by Design* who discuss intellectual rationalization, "the ability to unendingly assimilate experience to beliefs, and categories that seem not merely plausible ideas by objective truths." I gained insight into my own stance as a, sometimes, resistant learner through the following quote from Francis Bacon:

The human understanding is of its own nature prone to suppose the existence of more order and regularity in the world than it finds...[and] when it has once adopted an opinion draws all things else to support and agree with itIt is the peculiar and perpetual error of the intellect to be more moved and excited by affirmatives than by negatives...Numberless, in short, are the ways, and sometimes imperceptible, in which the affections color and infect the understanding(p59)

I realize that I frequently fight this tendency to intellectually rationalize. And the realization leads me to make additional connections to Costa & Kallick's *Habits of Mind*. If I really do want to continue learning about learning in a way that deepens my understanding, it will take persistence, thinking flexibly, metacognition, striving for accuracy, and remaining open to continuous learning in order to combat my resistance to change. Elder and Paul also talk about this *Asking Essential Questions* under the heading of "Questioning our Egocentricism." They suggest that to it is possible to actively target intellectual rationalization through relentless questioning of motives which usually stem from either the desire to protect selfish interests or striving to validate one's current way of thinking. They suggest a number of specific questions that address these two motives.

• Questions

I am realizing that pursuit of the essential questions that are important to me may be much more dangerous than I assumed. I've always thought of academic pursuits as being one of the safest. It seemed simple to just seek honest answers to honest questions. Now I'm getting a glimmer of the risk involved. What is knowledge? How is it constructed. Where/how can it be found? How do you know it is true knowledge? What are the universals?

In regard to my own understanding and teaching practice:

- am I making a complete match between the science of learning and the science of teaching?
- In what ways am I succeeding to make the match?
- Where are this mis-matches in my thinking and practice?
- Which of my "pet" concepts about learning, knowledge, and teaching are being challenged?
- Which are more amenable to change?
- Which are resisting change the most?
- Which do I want to change?
- Why do I want to change them?
- What is causing me to resist change?
- How might I effect change? What is my plan for professional development in order to effect the change?
- If learning is essentially change, and I resist change, have I learned? Must I change?

In regard to reading reflections in the future:

"yeah, this is what I always thought" is not an uncommon subtext of my reading reflections. To challenge this tendency, I need to ask, "What is new or what is challenging me to think differently than I did before?" "In what ways does this reading change my thinking?"

• Extending the Reading

Here are two websites developed for teachers to share their curriculum development efforts and ideas with one another.

www.curriki.org

www.ubdexchange.org work that is based on Understanding by Design

Find links to articles by Michael Michalkov about common qualities shared by great thinkers and supporting creative work environments. The principles he outlines could be used with professional development of teachers in mind. www.thinkertoys.biz Sample Articles:
"Thinking like a genius: eight strategies used by the super creative from Aristotle and Leonardo to Einstein and Edison"
"Bright Ideas: 15 ways to turn on the light bulbs over peoples' heads"
"Lights On!: we can't all be Edisons but there are definitely things we can do to generate better ideas."